

Transportation

MICHAEL L. HOLDER

Acting Secretary

January 20, 2017

Addendum No. 2

RE: **DD00197** 

To Whom It May Concern:

Reference is made to the above-mentioned project. The following changes/additions/deletions have been made:

- 1. Replace page 9 of the proposal with the attached page 9. The time restrictions for Intermediate Contract Time Number 1 have been revised.
- 2. Replace page 13 of the proposal with the attached page 13. The DBE Goal has been revised to **0.0** %.
- 3. The Pay Unit for "Partial Removal of Existing Structure" has been changed from Lump Sum to Square Foot. Replace page BP-33 of the proposal with the attached page BP-33.
- 4. Page BP-33A BP-33C have been added and contain the special provision for "Concrete Repairs". Please include the attached pages BP-33A BP-33C.
- 5. Replace the Proposal Item Sheets with the attached sheets. The change in pay items reflect the changes in the proposal listed above.
- 6. Replace Sheet S-1 of the Structure Plans with the attached S-1 sheet.
- 7. Replace Sheet TMP-1B of the Traffic Management Plans with the attached TMP-1B sheet.

This sheet and attachments shall be made a part of the plans and bid documents and shall be submitted with the bid. Bids submitted without the addenda and attachments will be considered non-responsive.

If there are any questions, please contact me at (252) 237-6164

Sincerely,





W. Matthew Clarke Division Four Project Manager

WMC/ Attachment

# INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

(2-20-07) 108 SPI G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on **I-95** during the following time restrictions:

# DAY AND TIME RESTRICTIONS

For all Operations except for PPC Overlay 7:00 AM to 8:00 PM Monday through Thursday 7:00 AM to 11:00 PM Friday through Sunday

For PPC Overlay only Week after Labor Day to Week before Memorial Day 12:00 PM Friday to 12:00 AM Sunday

In addition, the Contractor shall not close or narrow a lane of traffic on **I-95**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

# HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of **6:30 AM** December 31st and **8:00 PM** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday, or Monday, then until **8:00 PM** the following Tuesday.
- 3. For **Easter**, between the hours of **6:30 AM** Thursday and **8:00 PM** Monday.
- 4. For **Memorial Day**, between the hours of **6:30 AM** Friday and **8:00 PM** Tuesday.
- 5. For **Independence Day**, between the hours of **6:30 AM** the day before Independence Day and **8:00 PM** the day after Independence Day.
  - If **Independence Day** is on a Friday, Saturday, Sunday, or Monday, then between the hours of **6:30 AM** the Thursday before Independence Day and **8:00 PM** the Tuesday after Independence Day.
- 6. For **Labor Day**, between the hours of **6:30 AM** Friday and **8:00 PM** Tuesday.
- 7. For **Thanksgiving Day**, between the hours of **6:30 AM** Tuesday and **8:00 PM** Monday.
- 8. For **Christmas**, between the hours of **6:30 AM** the Friday before the week of Christmas Day and **8:00 PM** the following Tuesday after the week of Christmas Day.

JC-1 *Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction% 20 Forms/Joint% 20 Check% 20 Notification% 20 Form.pdf

Letter of Intent - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE for the amount listed at the time of bid.

 $http://connect.ncdot.gov/letting/LetCentral/Letter \%\,20 of \%\,20 Intent \%\,20 to \%\,20 Perform \%\,20 as \%\,20 Authorized Contractor and Contract$ 

Listing of DBE Subcontractors Form - Form for entering DBE subcontractors on a project that will meet this DBE goal. This form is for paper bids only.

http://connect.ncdot.gov/municipalities/Bid% 20 Proposals% 20 for% 20 LGA% 20 Content/08% 20 DBE% 20 Subcontractors% 20 (Federal).docx

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where DBEs quoted on the project. This sheet is submitted with good faith effort packages.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls

# **DBE Goal**

The following DBE goal for participation by Disadvantaged Business Enterprises is established for this contract:

Disadvantaged Business Enterprises 0.0 %

- (A) If the DBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth above as the DBE goal.
- (B) *If the DBE goal is zero*, the Contractor shall make an effort to recruit and use DBEs during the performance of the contract. Any DBE participation obtained shall be reported to the Department.

# **Directory of Transportation Firms (Directory)**

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as DBE certified shall be used to meet the DBE goal. The Directory can be found at the following link. https://partner.ncdot.gov/VendorDirectory/default.html

#57 Stone will be measured and paid for at the contract unit price bid per ton and will be full compensation for the cost of materials, placement and compaction, labor, tools, equipment and incidentals necessary to complete the repair work.

Payment will be made under:

Pay Item Pay Unit

#57 Stone Ton

# PARTIAL REMOVAL OF EXISTING STRUCTURE

(SPECIAL)

The Contractor shall remove existing concrete slope protection and excavate to facilitate slope protection repairs as detailed in the plans. The Contractor is liable for any damage caused to structure elements that are to be retained.

No materials are allowed to fall into the water. Removed materials shall become the possession of the Contractor. The Contractor is responsible for disposing of all materials in an acceptable manner.

At locations where repairs have been made to concrete slope protection using rip rap, the Contractor shall excavate and remove rip rap to provide for uniform concrete slope protection. If the underlying material is well compacted at locations where rip rap has been used for repairs, the Contractor, with approval from the Engineer, will not be required to excavate an additional 6" for placement of #57 stone; the proposed Class A concrete can be placed over well compacted rip rap repairs to the appropriate thickness and level.

All work covered by this Special Provision shall be paid for at the contract square yard price for "Partial Removal of Existing Structure". The above price and payment will be full compensation for furnishing all labor, equipment, materials, and any incidentals necessary to complete the demolition, removal, and disposal of concrete slope protection and required excavation.

Payment will be made under:

Pay ItemPay UnitPartial Removal of Existing StructureSquare Yard

# **CONCRETE REPAIRS**

(12-5-12)

## DESCRIPTION

Work includes removal of concrete in spalled, delaminated and/or cracked areas of the existing caps and columns in reasonably close conformity with the lines, depth, and details shown on the plans, described herein and as established by the Engineer. This work also includes straightening, cleaning, and replacement of reinforcing steel, doweling new reinforcing steel,

removing all loose materials, removing and disposing of debris, formwork, applying repair material, and protecting adjacent areas of the bridge and environment from material leakage. The repair material shall be one of the below described materials unless otherwise noted in the plans or provisions.

The location and extent of repairs shown on the plans described herein are general in nature. The Engineer determines the extent of removal in the field based on an evaluation of the condition of the exposed surfaces. The Contractor shall coordinate removal operations with the Engineer. No more than 30% of a round or square column or 30% of the bearing area under a beam shall be removed without a temporary support system and approval from the Engineer.

Repair, to the Engineer's satisfaction, any portion of the structure that is damaged from construction operations. No extra payment is provided for these repairs.

# REPAIR MATERIAL OPTIONS

# **Polymer Modified Concrete Repair Material**

Repair material shall be polymer modified cement mortar for vertical or overhead applications and shall be suitable for applications in marine environments. Material shall be approved for use by NCDOT. Submit repair material to the Engineer for review and approval prior to beginning the work. Color of repair material shall be concrete gray.

Prior to the application of repair mortar, square up edges in repair areas, thoroughly clean surfaces to be repaired and remove all loose materials. Remove grease, wax, salt, and oil contaminants by scrubbing with an industrial grade detergent or degreasing compound followed by a mechanical cleaning. Remove weak or deteriorated concrete to sound concrete by bush hammering, gritblasting, scarifying, waterblasting, or other approved methods. Remove dirt, dust, laitance and curing compounds by gritblasting, sanding, or etching with 15% hydrochloric acid. Acid etch only if approved by the Engineer. Follow acid etching by scrubbing and flushing with copious amounts of clean water. Check the cleaning using moist pH paper. Water cleaning is complete when the paper reads 10 or higher.

Follow all mechanical cleaning with vacuum cleaning.

When surface preparation is completed, mix and apply repair mortar in accordance with manufacturer's recommendations. Use aggregate that is washed, kiln-dried, and bagged. Apply bonding agent to all repair areas immediately prior to placing repair mortar. Repair areas shall be formed unless otherwise approved by the Engineer. Form areas to establish the original neat lines of the member being repaired.

Apply repair mortar to damp surfaces only when approved. In such instances, remove all free water by air-blasting. After applying the repair mortar, remove excessive material and provide a smooth, flush surface.

# **Class A Concrete Repair Material**

Repair material shall be Class A Portland Cement Concrete as described in Section 1000 of the Standard Specifications.

Prior to the application of Class A concrete, square up edges in repair areas, thoroughly clean surfaces to be repaired and remove all loose materials. Remove grease, wax, salt, and oil contaminants by scrubbing with an industrial grade detergent or degreasing compound followed by a mechanical cleaning. Remove weak or deteriorated concrete to sound concrete by bush hammering, gritblasting, scarifying, waterblasting, or other approved methods. Remove dirt, dust, laitance and curing compounds by gritblasting, sanding, or etching with 15% hydrochloric acid. Acid etch only if approved by the Engineer. Follow acid etching by scrubbing and flushing with copious amounts of clean water. Check the cleaning using moist pH paper. Water cleaning is complete when the paper reads 10 or higher.

Follow all mechanical cleaning with vacuum cleaning.

Upon completion of surface preparation, mix and apply concrete in accordance with Standard Specifications and/or manufacturer's recommendations. Use aggregate that is washed, kiln-dried, and bagged. Apply bonding agent to all repair areas immediately prior to placing repair mortar. Repair areas shall be formed unless otherwise approved by the Engineer. Form areas to establish the original neat lines of the member being repaired.

Apply concrete to damp surfaces only when approved. In such instances, remove all free water by air-blasting. After applying the repair mortar, remove excessive material and provide a smooth, flush surface.

# TEMPORARY WORK PLATFORM

Prior to beginning any repair work, provide details for a sufficiently sized temporary work platform at each repair location. Design steel members to meet the requirements of the American Institute of Steel Construction Manual. Design timber members in accordance with the "National Design Specification for Stress-Grade Lumber and Its Fastenings" of the National Forest Products Association. Submit the platform design and plans for review and approval. The design and plans shall be sealed and signed by a North Carolina registered Professional Engineer. Do not install the platform until the design and plans are approved. Drilling holes in the superstructure for the purpose of attaching the platform is prohibited. Upon completion of work, remove all anchorages in the substructure and repair the substructure at no additional cost to the Department.

## MEASUREMENT AND PAYMENT

Concrete Repairs will be measured and paid for at the contract unit price bid per cubic foot and will be full compensation for removal, containment and disposal off-site of unsound concrete including the cost of materials, reinforcing steel, labor, tools, equipment and incidentals necessary to complete the repair work. Depth will be measured from the original outside concrete face. The Contractor and Engineer will measure quantities after removal of unsound concrete and before application of repair material. Payment will also include the cost of sandblasting, surface cleaning and preparation, cleaning of reinforcing steel, placement of new reinforcing steel, cost of temporary work platform, testing of the soundness of the exposed

concrete surface, furnishing and installation of repair mortar material, curing and sampling of concrete, and protection/cleaning of adjacent areas from splatter or leakage.

Reinforcing Steel that is required for the repairs will be in accordance with Section 425 of the Standard Specifications.

Payment will be made under:

Pay Item Pay Unit

Concrete Repairs Cubic Feet

Jan 20, 2017 10:52 am

# ITEMIZED PROPOSAL FOR CONTRACT NO. DD00197

Page 1 of 2

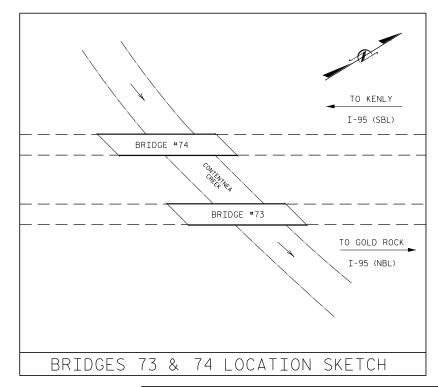
County: Wilson

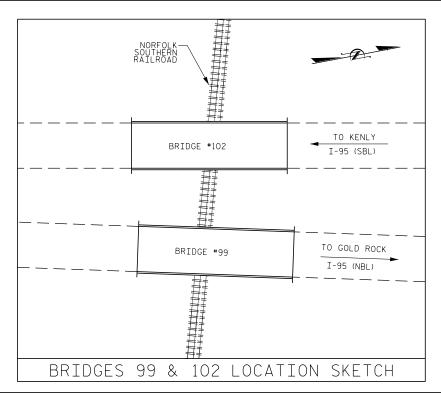
	STRUCTURE ITEMS  00 MOBILIZATION	Lump Sum	1.8	
	00 MOBILIZATION	Lump Sum	1.6	
	00 MOBILIZATION	Lump Sum	1.0	
0000-E 6			L.S.	
	0 ASPHALT CONC SURFACE COURSE, TYPE S9.5D	540 TON		
00000-E 62	POLYMER MODIFIED ASPHALT BIN- DER FOR PLANT MIX	42 TON		
0000-E 66	55 MILLED RUMBLE STRIPS (ASPHALT CONCRETE)	2,400 LF		
11 00000-E	10 WORK ZONE SIGNS (STATIONARY)	1,359 SF		
0000-E 11	10 WORK ZONE SIGNS (PORTABLE)	608 SF		
0000-E 11	10 WORK ZONE SIGNS (BARRICADE MOUNTED)	20 SF		
0000-N 11	15 FLASHING ARROW BOARD	8 EA		
00000-N 11	20 PORTABLE CHANGEABLE MESSAGE SIGN	13 EA		
0000-N 11	30 DRUMS	200 EA		
0000-E 11	45 BARRICADES (TYPE III)	72 LF		
0000-N 11	65 TMA	4 EA		
00000-N S	P LAW ENFORCEMENT	280 HR		
0000-N 11	80 SKINNY DRUM	20 EA		
	05 PAINT PAVEMENT MARKING LINES (4")	6,827 LF		
0000-E 12	05 POLYUREA PAVEMENT MARKING LINES (6", **********) (HIGHLY REFLECTIVE)	6,827 LF		
00000-E 12	05 REMOVAL OF PAVEMENT MARKING LINES (4")	1,000 LF		
00000-N 12	51 PERMANENT RAISED PAVEMENT MARKERS	13 EA		
	0000-N 11 0000-N 51 0000-N 11 0000-E 12 0000-E 12	1165 TMA	LF   1165 TMA	LF

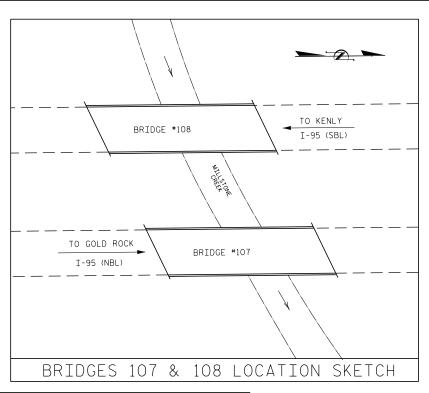
# ITEMIZED PROPOSAL FOR CONTRACT NO. DD00197

County: Wilson

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0019	4905000000-N	1253	SNOWPLOWABLE PAVEMENT MARKERS	38 EA		
0020	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	6.8		
0021	8622000000-E	 876	GEOTEXTILE FOR DRAINAGE	CY  61.1		
				SY		
0022	8660000000-E	SP	CONCRETE REPAIRS	2 CF		
0023	8893000000-E	 SP	GENERIC STRUCTURE ITEM	24.5		
00_0	_	G.	PARTIAL REMOVAL OF EXISTING ST RUCTURE 107	SY		
0024	8893000000-E	SP	GENERIC STRUCTURE ITEM PARTIAL REMOVAL OF EXISTING ST RUCTURE 108	24.5 SY		
0025	8867000000-E	SP	GENERIC STRUCTURE ITEM SILICONE JOINT SEALANT	1,905 LF		
0026	8867000000-E	SP	GENERIC STRUCTURE ITEM STEEL PLATE	288 LF		
0027	8874000000-E	SP	GENERIC STRUCTURE ITEM #57 STONE	10.2 TON		
0028	8881000000-E	SP	GENERIC STRUCTURE ITEM POLYESTER POLYMER CONCRETE MAT ERIALS	230 CY		
0029	8893000000-E	SP	GENERIC STRUCTURE ITEM CONCRETE DECK REPAIR FOR PPC O VERLAY	39 SY		
0030	1330000000-E	607	INCIDENTAL MILLING INCIDENTAL MILLING	3,586 SY		
0031	8893000000-E	SP	GENERIC STRUCTURE ITEM PLACING & FINISHING PPC OVERLA Y	6,608 SY		
0032	8161000000-E	420	GROOVING BRIDGE FLOORS	55,734 SF		







	TOTAL BILL OF MATERIAL											
BRIDGE NO.	INCIDENTAL MILLING	GROOVING BRIDGE FLOORS	CONCRETE REPAIRS	CLASS A CONCRETE	POLYESTER POLYMER CONCRETE MATERIALS	PLACING & FINISHING PPC OVERLAY	#57 STONE	PARTIAL REMOVAL OF EXISTING STRUCTURE	* CONCRETE DECK REPAIR FOR PPC OVERLAY	STEEL PLATE	SILICONE JOINT SEALANT	GEOTEXTILE FOR DRAINAGE
	SQ. YD.	SQ.FT.	CU.FT.	CU. YD.	CU. YD.	SQ. YD.	TON	SQ. YD.	SQ. YD.	LN.FT.	LN. FT.	SQ. YD.
73	916	13,491			56	1608			7.0	48	420	
74	534	13,491			56	1608			7.0	48	420	
99	534	6,581			27	778			5.0	48	241	
102	534	6,574			27	777			10.0	48	241	
107	534	8,415	1.0	4.1	34	987	6.1	24.5	5.0	48	318	36.7
108	534	7,182	1.0	2.7	30	850	4.1	24.5	5.0	48	265	24.4
TOTAL	3,586	55,734	2.0	6.8	230	6,608	10.2	49.0	39.0	288	1,905	61.1

# **GENERAL NOTES:**

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION, ONLY. CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING THE BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATION OF BRIDGE DECK.

THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.

LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES.

EXISTING BRIDGE CONCRETE DECK SHALL BE REPAIRED PRIOR TO THE SURFACE PREPARATION AND APPLICATION OF THE PPC OVERLAY, AT LOCATIONS SHOWN IN THE PLANS OR AS DETERMINED BY THE ENGINEER, IF NECESSARY, SUCH LOCATIONS MAY BE REPAIRED WITH PPC.

\* CONCRETE DECK REPAIR FOR PPC OVERLAY IS NOT ANTICIPATED. A TOKEN AMOUNT IS INDICATED FOR PRICING PURPOSES, IN CASE UNANTICIPATED CONCRETE DECK REPAIR AREAS ARE ENCOUNTERED. SEE POLYESTER POLYMER CONCRETE DECK OVERLAY SPECIAL PROVISION FOR DECK REPAIR REQUIREMENTS.

FOR #57 STONE, SEE SPECIAL PROVISIONS.

FOR SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION

FOR PARTIAL REMOVAL OF EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

FOR STEEL PLATE, SEE SPECIAL PROVISIONS.

FOR POLYESTER POLYMER CONCRETE BRIDGE DECK OVERLAY, SEE SPECIAL PROVISIONS. REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATIONAD5083097249488 AVAILABLE IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY
BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION
AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

PROJECT NO.\_\_ I-5976 WILSON COUNTY BRIDGE NO. 73 & 74 99, 102, 107 & 108

GENERAL NOTES

LOCATION SKETCHES

TOTAL BILL OF MATERIALS REVISIONS S-1 DATE: NO. BY: DATE: TOTAL SHEETS 48

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DocuSigned by:

18565

NGINES

1/20/2017

DRAWN BY : \_\_\_\_ S. T. SANDOR/ M.WELDON DATF: 08/2016 W.M.CLARKE/ W.SMITH CHECKED BY : DATE: 08/2016

19-JAN-2017 15:07 R:\Structures\DGNs\401\_001\_I5727\_SMU\_S1\_GD.DGN

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

### TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

I-95 7:00 A.M.-8:00 P.M. MONDAY THRU THURSDAY 7:00 A.M.-11:00 P.M. FRIDAY THRU SUNDAY

WEEK AFTER LABOR DAY TO WEEK BEFORE MEMORIAL DAY
ROAD NAME OPERATION DAY AND TIME RESTRICTIONS

-95 PPC OVERLAY ONLY 12:00 P.M. FRIDAY TO 12:00 A.M. SUNDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME ALL ROADS

### **HOLIDAY**

- 1) FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES. AS DIRECTED BY THE ENGINEER.
- 2) FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:30 A.M. DECEMBER 31ST TO 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:30 A.M. THURSDAY AND 8:00 P.M. TUFSDAY
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY TO 8:00 P.M. WEDNESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF INDEPENDENCE DAY AND 8:00 P.M. THE FOLLOWING MONDAY AFTER THE WEEK OF INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY AND 8:00 P.M. WEDNESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:30 A.M. TUESDAY TO 8:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

I-95 5:00 A.M.-10:00 P.M. MONDAY THRU SUNDAY

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAII

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- ) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- ) DO NOT INSTALL MORE THAN TWO(2) MILES OF LANE CLOSURE ON I-95 MEASURED FROM THE BEGINNING OF TAPER TO THE END OF THE LANE CLOSURE.
- J) DO NOT INSTALL MORE THAT ONE LANE CLOSURE IN ANY ONE DIRECTION ON I-95.
- K) FOR DAY TIME LANE CLOSURES, PLACE CMS BOARDS 1,2,3,4,5, AND 7 MILES IN ADVANCE OF THE LANE CLOSURE TAPER AS DIRECTED BY THE ENGINEER. USE A MESSAGE SIMILAR TO "RIGHT LANE CLOSED / XX MILES" AS DIRECTED BY THE FNGINFFR

### PAVEMENT EDGE DROP OFF REQUIREMENTS

L) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPEN TRAVEL LANE THAT HAS A DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

M) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

N) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### **SIGNING**

- O) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- P) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.
- Q) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- S) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

### TRAFFIC CONTROL DEVICES

- T) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (250 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

### PAVEMENT MARKINGS AND MARKERS

V) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS AS FOLLOWS:

ROAD NAMEMARKINGMARKERI-95POLYUREASNOW PLOWABLEBRIDGESPOLYUREAPERMANENT RAISED

- W) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- X) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

### MISCELLANEOUS

 Y) OPERATE EQUIPMENT AND CONDUCT OPERATIONS IN THE SAME DIRECTION AS THE FLOW OF TRAFFIC.



Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com License No. F-0672



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



**GENERAL NOTES**